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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/031,928	06/10/2002	Frederick James Moss	6540	8099

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EXAMINER

MACARTHUR, VICTOR L

ART UNIT	PAPER NUMBER
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3679

DATE MAILED: 03/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/031,928	Applicant(s) MOSS ET AL	
	Examiner Victor MacArthur	Art Unit 3679	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 December 2004.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-10 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4 and 7-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Fox (U.S. Patent 4,815,896).

Claim 1. Fox discloses (figs.5 and 6) an anti-scaling device comprising a hollow central body portion (8, 9) mounted on a bar (cable, col.1-2) for rotation around a transverse axis (cable axis), the bar passing through the hollow central body portion along the transverse axis, and several spike units (4) extending outwardly from the body portion in different directions wherein the spike units are mounted for rotation in use (screwing, col.1, ll.25-30) on the central body portion around axis non-congruent (perpendicular) with the transverse axis.

Claim 2. Fox discloses that the spike units are detachably mounted (screwing, col.1, ll.25-30) on the central body portion.

Claim 3. Fox discloses that there are pairs of spike units (4 as seen in fig.6) disposed in a diametrically opposed relationship relative to the central body portion.

Claim 4. Fox discloses that the central body portion has spigots (13) for mounting the spike units.

Claim 7. Fox discloses (fig.7) that rows of sharp-edged teeth (4) are axis aligned along the central body portion.

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Claim 8. Fox discloses (fig.6) that the spike units (4) are in the form of partially rotatable serrated propellers (within the broadest reasonable interpretation of the claim language).

Claim 9. Fox discloses that the spike units are pivotably mounted (screwing, col.1, ll.25-30).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 5, 6 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Francis (U.S. Patent 4,739,970) in view of Fox (U.S. Patent 4,815,896).

Claim 1. Francis discloses (figs.1 and 6) an anti-scaling device comprising a hollow central body portion (34) mounted on a bar (36) for rotation around a transverse axis (central axis of bar), the bar passing through the hollow central body portion along the transverse axis, and several spike units (6) extending outwardly from the body portion in different directions wherein the spike units are mounted for rotation in use (screwing, col.1, ll.25-30) on the central body portion around an axis. Francis does not disclose that the spike unit rotation axis is non-congruent with the transverse axis. Fox teaches (fig.5 and 6) a spike unit rotation axis (axis of 13) that is non-congruent with a transverse axis (axis through 8 and 9). The Fox non-congruent axis allows for the accommodation of spikes in a greater number of directions (e.g. four directions rather than two). It has generally been recognized that the rearranging of parts of an

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invention involves only routine skill in the art. In re Japikse, 86 USPQ 70. Accordingly, it would have been obvious to one of ordinary skill in the art to modify the Francis axis to be non-congruent, as taught by Fox, for the purpose of allowing for spikes in a greater number of directions, and additionally since such practice is a design consideration within the skill of the art.

Claim 5. Francis discloses serrated webs (26) extending outwardly from the central body portion between the spike units.

Claim 6. Francis discloses that the serrated webs extend along radial axis displaced 45 degrees from the radial axis of the spike units (as seen in fig. 1).

Claim 10. Francis discloses that the device is moulded from a plastic material (col.4, ll.4-8).

Response to Arguments

Applicant's arguments with regard to the claim rejections have been fully considered but they are not persuasive.

The Applicant argues that the prior art is not an anti-scaling device since the intended use of the prior art (protection of cables from sharks; Fox, col.1, ll.25-30) is different from the intended use of the Applicant's invention. This is not persuasive since the claims are directed to a product rather than a method of using a product and the prior art is structurally capable of performing the Applicant's intended use. A product claim is never allowable if the prior art anticipates all of the Applicant's positively claimed structure and is capable of performing any claimed intended use limitations. Capability does not require that the prior art disclose the

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Applicant's specific intended use or any other intended use, for that matter. Rather, capability requires only that the prior art structure analogous to the Applicant's positively claimed structure be inherently able to perform the Applicant's intended use. As such, the Applicant's invention cannot be distinguished over the prior art by merely describing structure with which the Applicant's invention is intended to be used, wherein the prior art is fully capable of the same usage.

The Applicant argues that the prior art cable is not a bar. This is not persuasive. The word "bar" is taken by the Examiner to mean "a straight piece that is longer than it is wide and has any of various uses" in accordance with Merriam-Webster's Collegiate Dictionary Tenth Edition. The claims do not recite any limitation forbidding a bar that is a cable.

The Applicant argues that the prior art is not an anti-scaling device since the intended use of the prior art spike units (for rotation during screwing; Fox, col.1, ll.25-30) is different from the intended use of the Applicant's invention (for rotation in use; line5 of claim 1). This is not persuasive since the Applicant's claims recite no limitation forbidding screwing and since screwing is a "use" within the broadest reasonable interpretation of the claim terminology. Furthermore, as stated above, prior art used to reject a product claim need not disclose the specific intended use of the Applicant's invention but rather need only to be structurally capable of such usage. The fact that the prior art to Fox is intended to be used in a deep sea shark infested environment is irrelevant to the question of it's structural capability to be used in other environments (i.e. that intended by the Applicant).

The Applicant argues that the limitation "several spike units rotatably mounted" requires that several spike units are rotated simultaneously. This is not persuasive. The limitation

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“rotatably mounted” requires that each spike unit is mounted such that it is only capable of being rotated (either separately or simultaneously). If the Applicant wishes to pursue claim language that describes the argued condition, the Applicant should file a CIP for a Method of Using An Anti-Scaling Device (rather than the product claims currently being pursued) reciting the process step --wherein several spike units are rotated simultaneously--. Note that even this limitation, in and of itself, would be obvious since assembling more than one spike unit at a time (e.g. by multiple workers, specialized machinery, etc.) would greatly decrease the assembly time of the prior art to Fox.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Victor MacArthur whose telephone number is (703) 305-5701. The Examiner can normally be reached on 8:30am - 5:00pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Daniel P. Stodola can be reached on (703) 308-2686. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

VLM

VLM

February 28, 2005

Daniel P Stodola

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